## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

11-312646

(43) Date of publication of application: 09.11.1999

(51)Int.CI.

H01L 21/205 C23C 16/50 C23F 4/00 H01L 21/3065 // H05H 1/46

(21)Application number: 10-119022

(71)Applicant: TOKAI CARBON CO LTD

**TOKYO ELECTRON LTD** 

(22)Date of filing:

28.04.1998

(72)Inventor: HAINO KAZUYOSHI

KAZAMA KOICHI

## (54) PROTECTING MEMBER FOR INNER WALL OF CHAMBER AND PLASMA PROCESSOR

## (57)Abstract:

PROBLEM TO BE SOLVED: To provide a protecting member for the inner wall of the chamber of a plasma processor, which can be used for a long time by specifying the material property of glass-like carbon material and the plasma processor, wherein the described protecting member is arranged.

SOLUTION: A chamber inner-wall protecting member 2 is a hollow-shaped protecting member, which protects the inner wall of the chamber of a plasma processor, and is formed of the glass-like carbon material having the characteristics of the volume resistivity of  $1\times10^{-2}~\Omega$  cm or less and a thermal conductivity of 5~W/m.K or more as an integral body structure. It is preferable that the thickness of the protecting member 2 be 4 mm or more, and the average roughness (Ra) of the inside surface of 2.0  $\mu m$  or less. The plasma processor is so constituted that the chamber inner-wall protecting member 2 having these material properties is arranged along the chamber inner-wall part of the plasma processor, the chamber inner-wall part and the protecting member 2 are conducted electrically, and the chamber is grounded.

